

**PAK2 Rabbit mAb**  
Catalog # AP75868**Specification**

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**PAK2 Rabbit mAb - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q13177</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	58043

**PAK2 Rabbit mAb - Additional Information**

Gene ID 5062

**Other Names**

PAK2

**Dilution**

WB~~1/500-1/1000

IHC~~1/50-1/100

**Format**

Liquid

**PAK2 Rabbit mAb - Protein Information**

Name PAK2

**Function**

Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell motility, cell cycle progression, apoptosis or proliferation (PubMed: [12853446](http://www.uniprot.org/citations/12853446)), PubMed: [16617111](http://www.uniprot.org/citations/16617111)), PubMed: [19273597](http://www.uniprot.org/citations/19273597)), PubMed: [19923322](http://www.uniprot.org/citations/19923322)), PubMed: [33693784](http://www.uniprot.org/citations/33693784)), PubMed: [7744004](http://www.uniprot.org/citations/7744004)), PubMed: [9171063](http://www.uniprot.org/citations/9171063)).

Acts as a downstream effector of the small GTPases CDC42 and RAC1 (PubMed: [7744004](http://www.uniprot.org/citations/7744004)). Activation by the binding of active CDC42 and RAC1 results in a conformational change and a subsequent autophosphorylation on several serine and/or threonine residues (PubMed: [7744004](http://www.uniprot.org/citations/7744004)). Full-length PAK2 stimulates cell survival and cell growth (PubMed: [7744004](http://www.uniprot.org/citations/7744004)). Phosphorylates MAPK4 and MAPK6 and activates the downstream target MAPKAPK5, a regulator of F-actin

polymerization and cell migration (PubMed:[21317288](http://www.uniprot.org/citations/21317288)). Phosphorylates JUN and plays an important role in EGF-induced cell proliferation (PubMed:[21177766](http://www.uniprot.org/citations/21177766)). Phosphorylates many other substrates including histone H4 to promote assembly of H3.3 and H4 into nucleosomes, BAD, ribosomal protein S6, or MBP (PubMed:[21724829](http://www.uniprot.org/citations/21724829)). Phosphorylates CASP7, thereby preventing its activity (PubMed:[21555521](http://www.uniprot.org/citations/21555521), PubMed:[27889207](http://www.uniprot.org/citations/27889207)). Additionally, associates with ARHGEF7 and GIT1 to perform kinase-independent functions such as spindle orientation control during mitosis (PubMed:[19273597](http://www.uniprot.org/citations/19273597), PubMed:[19923322](http://www.uniprot.org/citations/19923322)). On the other hand, apoptotic stimuli such as DNA damage lead to caspase-mediated cleavage of PAK2, generating PAK-2p34, an active p34 fragment that translocates to the nucleus and promotes cellular apoptosis involving the JNK signaling pathway (PubMed:[12853446](http://www.uniprot.org/citations/12853446), PubMed:[16617111](http://www.uniprot.org/citations/16617111), PubMed:[9171063](http://www.uniprot.org/citations/9171063)). Caspase-activated PAK2 phosphorylates MKNK1 and reduces cellular translation (PubMed:[15234964](http://www.uniprot.org/citations/15234964)).

#### Cellular Location

[Serine/threonine-protein kinase PAK 2]: Cytoplasm Nucleus Note=MYO18A mediates the cellular distribution of the PAK2-ARHGEF7-GIT1 complex to the inner surface of the cell membrane

#### Tissue Location

Ubiquitously expressed. Higher levels seen in skeletal muscle, ovary, thymus and spleen

#### PAK2 Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### PAK2 Rabbit mAb - Images



